



# ALPHABET SOUP



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An EPA Region 4 (AL, FL, GA, KY, MS, NC, SC, TN) information update to inform regulators, organizations, and the interested public about The Food Quality Protection Act (FQPA), sustainable agriculture projects, pesticide registration and re-registration decisions, pesticide policy and Regional enforcement updates.

## English Classes Help with Pesticide Safety

*By Carmina Hanson, North Carolina Department of Agriculture and Consumer Services*

Agriculture employs a large percentage of immigrants. Eighty-one percent of all farm workers are foreign-born, according to the National Agricultural Workers Survey conducted in 2000 by the U.S. Department of Labor.

The North Carolina Employment Security Commission estimates migrant and seasonal farm workers in the state possibly exceeded 100,000 individuals in 2003. The Labor Department survey also reported that the majority of farm workers surveyed did not speak English, and just one-tenth of the foreign-born farm workers spoke or read English fluently.

This language barrier presents challenges for both the employer and worker, as communication skills are critical for good job performance. Good communication skills enable workers to learn more about their jobs and their employers, build better working skills, and improve customer service when contact with the general public is part of their job requirement.

To help reduce communication problems due to language barriers, one North Carolina farmer decided to teach

his Spanish-speaking employees English. The farmer partnered with Nash Community College's English as a Second Language Program (ESL) to accomplish this task.

The ESL coordinator developed a curriculum to fit the needs of the students and their employer. The English class was designed to give students the basic language skills to perform their daily jobs. Spanish-speaking employees who participated in this program are permanent employees on the farm. The course work included general English as a Second Language instruction and English for the workplace. At the end of 11 weeks, the 14 students had increased their ability to communicate in their workplace and community environments.

The English for the Workplace curriculum was designed to provide thorough instruction on the necessary skills for pesticide management. The N.C. Department of Agriculture and Consumer Services Pesticide Section participated with the pilot project, providing instruction and pesticide-specific training including pesticide use, disposal, application and safety. The goal for students completing the training is to take the N.C. Pesticide Private Applicator examination.

The Pesticide Section's bilingual specialist and field personnel partnered to help the Nash Community College ESL coordinator develop this segment of the class. The class used the same pesticide training material as those used by English-speaking applicators.

Pesticide specialists instructed students on the correct application of pesticides, pesticide safety and pesticide labels. They prepared three practice exams for the end of each week, reviewed the material covered during the week, and held question-and-answer sessions with the class. As part of a practice session, NCDA&CS developed "real-life" scenarios for the students to work on. The scenarios were discussed later with the group.

"This project was beneficial because it provided the Pesticide Section with an opportunity to interact firsthand with farm workers and evaluate their level of knowledge and understanding of pesticide safety and application," said Jim Burnette, Pesticide Section Administrator. "It has also established a foundation for the development of a class curriculum in which Spanish-speaking farm workers can learn English and pesticide management to further improve their skills and performance."

Project organizers plan to evaluate the

program to determine areas for improvement, and they hope to seek additional funding to continue offering this type of training to other farmworkers.

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### Worker Protection Standard

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*By Christine Cairns, Life Scientist, Region 4 EPA (originally published in the Spanish-language magazine "La Voz Latina.")*

The Worker Protection Standard, or WPS, is a federal regulation which is designed to protect agricultural workers from exposure to pesticides and reduce health risks associated with occupational exposure to pesticides on farms or in nurseries, greenhouses and forests. The WPS is designed to protect *all* agricultural workers in the United States, regardless of citizenship or immigration status. The WPS has been in effect since 1992 and protects both pesticide handlers (including those who mix, prepare and apply pesticides) as well as agricultural field workers, such as cultivators and harvesters.

#### *Pesticides and health effects*

Although pesticides are important to the success of agriculture in this country, the fact remains that pesticides are chemicals that are specifically designed to kill living organisms, and thus pesticides are poisons and can never be considered harmless to humans. Pesticides can cause acute (temporary) poisonings when someone is exposed to too much pesticide through ingestion, inhalation, or contact with skin and eyes, and pesticides can also have long-term health effects on someone who is exposed to smaller amounts of a pesticide repeatedly over long periods of time.

Agricultural workers are especially at risk for pesticide poisonings due to the nature of their work. Some symptoms of an acute pesticide poisoning may

include stomach pain, nausea, vomiting, sore throat, cough, lung congestion, headache, and in severe cases seizures can occur. According to data from California's pesticide reporting system, an estimated 10,000-20,000 cases of farmworker pesticide poisonings occur each year. Children are especially susceptible to pesticide poisonings and should always avoid playing in agricultural areas where pesticides are used. Agricultural workers that have been working with pesticides should wash and change clothes before returning home, and never take pesticides from the agricultural workplace home. Most agricultural pesticides are not approved for use in the home.

In addition to the acute effects, laboratory studies indicate that long term pesticide exposure can cause nerve damage, cancer, and birth defects in pregnant women. It is for these reasons that EPA, in cooperation with the States, carefully regulates pesticides to insure that their use does not pose an undue risk to human health and the environment. The WPS is one of the regulation strategies that EPA uses in order to protect the health of agricultural workers, who are in a high risk population due to the nature of their work.

#### *Requirements of the WPS*

If you are an agricultural worker of any type, you have rights under the WPS which are important to know. The WPS requires agricultural employers to do five main things in order to protect their workers:

- 1. Insure that workers and handlers are properly trained in pesticide safety--**All workers must be trained in pesticide safety at the beginning of their employment and re-trained every five years. The training must be given in a language that workers can understand.
- 2. Notify workers/handlers of the time and date of pesticide**

**applications and enforce the Restricted Entry Interval (REI) --**Workers must be notified of the date and time of all applications and the length of the REI, meaning the amount of time that the area should have restricted access after pesticide application. The employer must always post this information at a central location - which must be a place where workers gather at the beginning of the day, or for lunch. At this location the employer must post the date, time, and location of all pesticide applications along with the name of the pesticide, its EPA registration number, the active ingredient, the length of the REI and the date and time that workers can again enter the treated area. In most cases, an employer is also required to post a sign at the site of the pesticide application that says "danger..pesticides..keep out."

**3. Provide workers/handlers with Personal Protective Equipment (PPE)--**Most agricultural pesticides require the use of PPE, which is special clothing to protect the worker from pesticide exposure, when applying and/or mixing and loading the pesticide, or when entering a field before the REI has expired. PPE may include coveralls, respirators, gloves, boots, protective eyewear, chemical resistant suits, and aprons.

**4. Provide decontamination supplies--**A decontamination site must be provided to workers and handlers for the purpose of washing off pesticide residues. The site must have water, soap and single-use towels, and handlers must also be provided a change of clothes.

**5. Provide emergency medical assistance when needed--**Should a poisoning occur, the employer must provide transportation to the nearest medical facility. It is a good idea to take the pesticide label to the doctors' office. This will assist in identifying the pesticide being used and the active ingredient. The patient can then be treated correctly.

*The label is the law*

The employer and workers must read and comply with the label directions on any pesticide container. Label directions will include specific WPS requirements, such as the amount of time required for an REI following application, the kind of PPE which should be used, the proper method of decontamination if exposure occurs on skin, eyes, through ingestion or inhalation, and other specific guidelines. When in doubt about anything, always check the label for guidance.

*Reporting Violations*

If you know of a WPS violation, you can report it anonymously to your state pesticide enforcement agency (see contact information below). The agency will likely send an inspector to investigate the violation. Agricultural workers have the right to file complaints against their employers if they feel a violation has occurred, and the employer does *not* have the right to retaliate against a complaining employee. However, EPA and the State agencies recognize that most agricultural workers will not want their identity revealed if they complain, and thus all complaints can be made confidentially. We need the help of agricultural workers in order to properly enforce the WPS. We cannot know of violations if they are not reported, and therefore we cannot properly enforce the law to ensure the safety of workers without the help of the agricultural worker community. Remember that citizenship and immigration status are irrelevant. The law exists to protect all agricultural workers.

If you wish to make a complaint in Georgia, call toll free: 1-800-282-5852 and ask for extension 9373, or write: Georgia Department of Agriculture Pesticide Division, 19 Martin Luther King, Jr. Drive, Room 500, Atlanta, GA 30334. To make a complaint in South Carolina, call toll free: 1-800-209-1112 or write: Clemson University

Department of Pesticide Regulation, Clemson University DPR, 511 Washington Rd. Pendleton, SC 29670. If you are in another state, you may contact the Region 4 EPA offices at 404-562-8968 or write EPA Region 4 Pesticides Section, 61 Forsyth St. 12<sup>th</sup> Floor, Atlanta, GA 30303.

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**Pesticides in Rural Honduras**


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*By Amber Davis, Life Scientist,  
Region 4 EPA*

Pesticide issues in Latin America are very different than those we face in the United States. In some cases, environmental and human health laws are not as comprehensive as those here. It is not unheard of for pesticides banned in the U.S. to be legally purchased and applied to crops in Latin America. Another issue, not as often addressed, is the cost and accessibility of commercial pesticides in the rural areas of Latin America.

As a crop extensionist with the United States Peace Corps in Honduras, it was my job to teach nutrition and implement family gardens high in the mountains near the El Salvadoran



*Typical farming family in rural Honduras*

border. This of course included the use of pesticides.

In some of the communities that I worked in, it was a three hour walk to catch a bus. After a bus arrived (every couple hours or so), one had to travel another hour--provided that there weren't too many incidents of livestock in the road--to get to medium sized community that sold farm and garden supplies such as fertilizers, fungicides, and pesticides.

Money was scarce with every family that I knew. The per capita income in the area where I worked was less than \$300 per year. As a result, there was little, if any buying, of these products. Instead, I worked with families to teach them how to make their own garden necessities. We composted and used animal manure for fertilizers. Homemade fungicides consisted of lime, onions, salt, and water. And for pesticides we often used a hot chili pepper mixture.

Because my site was located at a high elevation--where winter comes with a vengeance--the pesticides often did a sufficient job. While they were economical, the production process was time consuming, and once made, the life of the pesticides was quite short--sometimes only twenty-four hours.

All of these issues led to some very difficult times for the families that I worked with--the families that eventually became the friends that I left behind in rural Honduras.

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**Enforcement and  
Compliance Updates**


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*North Carolina Investigations Helped  
Support \$500,00 Settlement in Region 1*

A North Kingston, RI manufacturer has agreed to a settlement worth \$500,000 to settle claims by the U.S. Environmental Protection Agency that it failed to properly register a mosquito attractant that was a part of a pesticide product it sold nationwide in 2002. The settlement

is the largest ever in a New England pesticide case.

According to the enforcement agreement, the American Biophysics Corp. (ABC) must pay a \$300,000 penalty and carry out three environmental and public-health related projects worth at least \$200,000. The company makes the "Mosquito Magnet," equipment used to control biting insects.

The settlement resolves a complaint filed by EPA in March 2003 charging that ABC failed to properly register and label a pesticide containing an attractant called "octenol" before widely distributing or selling it, as part of its Mosquito Magnet product, during 2002.

The agreement includes a certification by ABC that it is now in compliance with the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), the federal law under which EPA's original enforcement action was taken.

Over the past few years, ABC has seen significant growth in sales of its "Mosquito Magnet." Similar in appearance to a gas grill, these machines use propane and a small cartridge containing octenol to lure bugs towards a vacuum where they are drawn into a bag to dehydrate and die.

The EPA complaint specifically alleged that ABC produced and sold the octenol attractant, considered a pesticide under FIFRA, from March to July 2002 without a valid EPA registration number and with labeling that EPA found to be false or misleading.

The North Carolina Department of Agriculture and Consumer Services conducted inspections, at the request of EPA Headquarters, to document the distribution of unregistered Octenol in their state. Those inspection reports were sent to EPA Region 1 where they were combined with others to make

the case against American Biophysics Corporation, that ultimately resulted in the \$500,000 settlement.

### **PESTICIDE WORKER PROTECTION TIPS AND COMPLAINTS:**

#### *Departments of Agriculture Phone #s*

AL-334-240-7242

FL-850-488-3314

GA-404-656-9371

KY-502-564-7274

MS-662-325-7763

NC-919-733-3356

#### *Special Hotline #s*

SC-1-800-209-1112

TN-1-800-628-2631

### **Introducing.....**

#### ***Amber Davis***

Amber Davis is a new *Life Scientist* for Region 4 EPA in the Pesticides Section. Prior to joining EPA, Davis spent two years as a "Hillside Farming" Peace Corps Volunteer in Honduras. There she worked primarily with family gardens and nutrition. She was assigned to the municipality of San Pedro de Tutule (population 1500) in the department of La Paz. In addition to her Peace Corps initiated activities, Davis assisted host country nationals with their own reforestation and Tilapia fish pond projects. She was also an active member of the Peace Corps Honduras Gender and Development Committee.

Davis attended Abraham Baldwin Agricultural College and the University of Georgia. While in college, she was involved with the Collegiate FFA and the Student Council for Globalization. As an undergrad, Davis interned at Escuela de Agricultura de la Región Tropical Húmeda (School of Agriculture for the Humid Tropical Region) in Costa Rica, and in graduate school she studied ecology in Brazil. Davis holds a Master's Degree in Agricultural Education and a

Certificate in International Agriculture. She is from Chatsworth, Georgia.

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### **From the Editor.....**

To view an electronic version of *Alphabet Soup*, visit the Region 4 website at:

<<http://www.epa.gov/pesticides/local/region4/news/index.htm>>

Readers are encouraged to submit comments and suggestions to improve *Alphabet Soup*. To do so, please contact:

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### **Where to Find More Information About the Worker Protection Standard**

EPA Region 4 is in the process of developing a clearinghouse website of WPS materials, in cooperation with the Office of Pesticide Programs (OPP) and the National Agriculture Compliance Assistance Center in Region 7. We intend to have all WPS materials that have been developed by EPA and the States to be listed available either for direct download or through ordering. We anticipate the site will be available through the OPP WPS homepage (listed below) by the end of the fiscal year (September 2004). In the meantime, if you need more information on WPS or are looking for WPS materials, you can visit the National Agriculture Compliance Assistance web page at <http://www.epa.gov/agriculture/twor.html> or the OPP WPS homepage at <http://www.epa.gov/pesticides/health/worker.htm>.